MULTIMEDIA UNIVERSITY

STUDENT ID NO

MULTIMEDIA UNIVERSITY

FINAL EXAMINATION

TRIMESTER 2, 2016/2017

TSE2251/TIS2211 -SYSTEMS ANALYSIS AND DESIGN

(All sections / Groups)

2 MARCH 2017
9AM - 11AM
(2 Hours)

INSTRUCTIONS TO STUDENTS

1. This Question paper consists of 4 pages including this cover page.
2. This Question paper contains **SIX** questions of **10** marks each. Answer any **FIVE** questions.
3. The distribution of marks for each question is given.
4. Write all your answers in the Answer Booklet provided.

Question 1

(a) Prototyping can be used to improve the efficiency of the traditional 'system development life cycle(SDLC)' method. What is prototyping? Mention TWO advantages of prototyping. (3marks)

(b) Mention THREE important characteristics of 'Management Information Systems'. (3 marks)

(c) What are the FOUR key principles associated with 'eXtreme programming' method? Mention TWO advantages of 'eXtreme programming' (4 marks)

Question 2

(a) List any THREE activities performed by a manager during the project execution phase. (3 marks)

(b) Assume that you have a project with 10 activities labeled 1-10. The time taken for each activity and the predecessors are shown in the following table.

Activity	Time taken (in weeks)	Preceding Activity
1	2	-
2	3	1
3	2	2
4	4	2
5	6	3
6	7	3
7	8	3,6
8	8	6,7
9	10	4,5,8
10	4	7,8,9

(i) Draw the network diagram. (2 marks)

(ii) Calculate the (i) Earliest completion time (TE) and the (ii)Latest completion time(TL) For each activity. (4 marks)

(iii) List the activities which are on the critical path. (1 mark)

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Question 3

(a)What is corporate strategic planning of an organization? What are its three components? (3 marks)

(b) Briefly describe the THREE deliverables and outcomes of project initiation and planning phase of system development cycle. (3marks)

(c) Assuming one-time costs of an information system at $75,000 ,recurring costs of $35,000 per year, a discount rate of 12 percent, and a five-year time horizon, Calculate the Net Present Value(NPV) of all costs. (4marks)

Question 4

(a)Mention THREE types of documents that are useful for requirements determination of an information system? (3 marks)

(b)Distinguish between Process modeling and Logic modeling of an information system. (3 marks)

(c) Briefly describe FOUR modern methods used for requirements determination of an information system. (4 marks)

Question 5

(a)Draw the context diagram of a typical food-ordering system. (3 marks)

(b) What is 'gap analysis'? What is its use? (3 marks)

(c) Explain with an example the meaning of the term: 'Triggering operation' which is used in database design. What are its components? (4 marks)

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Question 6

(a) Define the term: Computer dialogue. Mention the steps involved in the dialogue design. (3marks)

(b)Explain the terms: (i)unit testing (ii)integration testing and (iii)system testing. (3marks)

(c)Explain the FOUR types of system maintenance. (4marks)

End of Question Paper